

Application No.: 10/734,948

Docket No.: JCLA12519

**In The Claims**

1. (currently amended) A non-azeotropic refrigerant mixture, comprising carbon dioxide and at least one kind of combustible refrigerant, and having a temperature glide, wherein the temperature glide produces a first temperature range between a beginning temperature of an evaporation and an intermediate temperature in an evaporation process for use as a refrigeration area, and a second temperature range from the intermediate temperature to a ~~temperature at an~~ ending temperature of the evaporation process for use as a cold storage area.

2. (original) The non-azeotropic refrigerant mixture of claim 1, wherein the combustible refrigerants are hydrocarbons.

3. (previously presented) The non-azeotropic refrigerant mixture of claim 1, wherein the combustible refrigerant is combustible HFC refrigerants.

4. (original) A refrigerating cycle, in which a compressor, a heat radiator, an expansion mechanism and an evaporator are connected by a refrigerant path, characterized in that the non-azeotropic refrigerant mixture of claim 1 is circulated in the refrigerating cycle.

5. (currently amended ) A refrigerating cycle, in which a compressor, a heat radiator, an expansion mechanism and an evaporator are connected by a refrigerant path, characterized in that the non-azeotropic refrigerant mixture of claim 1 is circulated in the refrigerating cycle, and the non-azeotropic refrigerant mixture is subjected to a hyper-supper critical state at a high pressure side of the evaporator.

6. (currently amended) A refrigerating cycle, in which a compressor, a heat radiator, an expansion mechanism and an evaporator are connected by a refrigerant path, characterized in

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that the non-azeotropic refrigerant mixture of claim 1 is circulated in the refrigerating cycle, the non-azeotropic refrigerant mixture is subjected to a ~~hyper~~ supper critical state at a high pressure side of the evaporator, and the evaporator is operated at a triple point temperature, -56.6°C, of the carbon dioxide.

7. (currently amended) A refrigerating device, comprising:

the refrigerating cycle of any one of claims 4-6; and

at least one additional evaporator added in the refrigerating cycle ~~as~~ to establish a plurality of evaporators, wherein a low temperature evaporator and a high temperature evaporator that can be operated at a high temperature higher than that of the low temperature evaporator are arranged in series.

8. (currently amended) The refrigerating device of claim 7, wherein an auxiliary heat exchanger for performing a heat exchange is arranged between a refrigerant path at the heat radiator side that is formed between an outlet side of the heat radiator and an inlet side of the expansion mechanism, and a refrigerant path at the evaporator side that is formed between an outlet side of the plurality of evaporators and an inlet side of the compressor.